

known as EVT-300 with SMARTCRUISE®. Another example of such a system is disclosed in U.S. Patent No. 6,076,622 assigned to Eaton VORAD Technologies, L.L.C., the disclosure of which is incorporated herein by reference. Any one of these systems can be used in connection with an embodiment of the present invention. As is known to those skilled in the art, the advanced cruise control system 80 communicates with the ECM 40 over the data bus 50 and preferably communicates data or instructions to the cruise control feature 41, which are then used to control fuel delivery to the engine 20, or control command signals issued to a compression brake (not shown). In a preferred embodiment, the advanced cruise control system 80, produces a periodic data output onto the data bus 50, which in a preferred embodiment occurs about every 100 ms. Those skilled in the art will recognize that other periodic rates could readily and easily be used. Although the advanced cruise control system 80 of a preferred embodiment produces periodic signals, in other embodiments different communications protocols and formats may be used without deviating from the scope of the present invention as defined by the appended claims. For example, the communications may be interrupt driven, or have hand-shaking whereby the ECM 40 prompts the advanced cruise control system 80 for data. Still other protocols and formats are known to those skilled in the art and could be used in connection with the present invention.

IN THE CLAIMS

Please replace claims 1, 2, 7, 8, and 11-16 with the amended claims provided below. For the Examiner's convenience, a marked-up version of the amended claims is provided in Exhibit B, and a clean version of all currently pending claims is provided in Exhibit C.

1. (Amended) A compression ignition engine, comprising:
an electronic controller, said electronic controller producing fuel delivery commands to control power output of said engine, said electronic controller including a cruise control mode;

an advanced cruise control system connected with said electronic controller and producing communication signals;

wherein said electronic controller receives said communication signals and calculates a fuel delivery command based, at least in part, on said communication signals at least when said electronic controller is in an advanced cruise control mode; and

wherein said electronic controller disengages said advanced cruise control mode in response to receiving no valid communication signal for greater than a first period of time.

2. (Amended) The compression ignition engine of claim 1, wherein said electronic controller disables said advanced cruise control mode in response to receiving no valid communication signal for greater than a second period of time.

7. (Amended) The compression ignition engine of claim 1, wherein said electronic controller re-engages said advanced cruise control system in response to one or more operator cruise control inputs.

8. (Amended) The compression ignition engine of claim 7, wherein said operator cruise control inputs include one of a cruise control resume switch and a set switch.

11. (Amended) A method of controlling a compression ignition engine equipped with an electronic controller and an advanced cruise control system, said method comprising:

receiving communication signals from said advanced cruise control system;

and

disengaging said advanced cruise control system as a function of not receiving one or more valid communication signals for a first time period.

12. (Amended) The method of claim 11, further comprising:

disabling said advanced cruise control system as a function of not receiving one or more valid communication signals for a second period of time.

13. (Amended) The method of claim 11, further comprising:
re-engaging said advanced cruise control after said step of disengaging, in response to one or more operator cruise control inputs.

14. (Amended) The method of claim 12, further comprising:
re-enabling said advanced cruise control in response to an operator turning off the engine and turning it back on.

15. (Amended) The method of claim 13, wherein said operator cruise control inputs include a cruise control resume switch.

16. (Amended) The method of claim 12, further comprising:
engaging cruise control, after said step of disabling, in response to one or more operator cruise control inputs.